

**Total Maximum Daily Load (TMDL)
Advisory Group Meeting Summary
December 14, 2000**

10:14 a.m. Welcome and Introductions

Mary Ellen Gray, of the Indiana Department of Environmental Management (IDEM), opened the meeting and requested introductions of all attendees. Housekeeping issues were first item of discussion. Ground rules are being written and will be available within the next two weeks. Ms. Gray stated that a facilitator is being considered for these meetings. IDEM is looking internally and with the U.S. Environmental Protection Agency (EPA) for possible funding for a facilitator. A subcommittee of the advisory group should be established for further discussion and evaluation of a facilitator.

Also discussed was the possibility of changing the meeting date schedule. The next meeting will be held on January 4, 2001. After that month, the meetings will remain on the second Thursday of each month unless notified otherwise.

Meeting minutes from the previous advisory group meeting were then discussed briefly. A comment was made that it was difficult to determine from the last meeting notes if a consensus was established for specific issues. It was stated that if a consensus is reached, then it should be noted in the meeting notes.

10:25 a.m. US EPA TMDL Program Overview Video

A short video (approximately 18 minutes) was shown which discussed the TMDL development process and water quality standards. The goal of a TMDL is to achieve and/or comply with a State's water quality standards. TMDLs establish maximum allowable pollutant loading per specific parameters for specific bodies of water. TMDLs consider both Point and Non-Point sources. There are two approaches to pollution control: one is "technology-based," while the second is "water quality-based." Water quality-based control is more stringent than technology-based controls. Under the water quality-based control approach, the following steps are taken:

- 1) Assessment to identify water quality problems;
- 2) Prioritize water problems (Section 303(d) list);
- 3) Develop TMDLs, based on priority list. Submit to EPA for review and approval;
- 4) Implement TMDLs;
- 5) Assess/monitor effectiveness of TMDLs.

The video concluded at 10:44 a.m.

10:45 a.m. Overview of New Federal TMDL Rules

Cindy Wagner (IDEM) presented an overview (accompanied with a handout) of the new federal TMDL rules. The new federal rules, promulgated by 40 CFR 130, Subpart C, will be effective on October 31, 2001. The following is information extracted from the handout presented by Ms. Wagner.

To list impaired water bodies, use all existing and readily available water quality related data and information. This could include information from: current 303(d) list, current 305(b) report, section 319 assessments, source water assessments, and other sources. IDEM will be responsible for submitting methodology to the EPA for review.

The methodology will describe how we will evaluate all existing and readily available water quality related data and information. Within the methodology, we must specify items such as: types of data and information, procedures and methods used to collect ambient water quality data, factors used for delisting and factors used to prioritize list.

The scope of the list shall focus on: water bodies impaired by pollutants, biological impairments, point source, nonpoint source combination, and must be in 4 parts. Part 1 shall include: waters impaired by 1 or more pollutants, unless listed in parts 2 or 3; Part 2 shall include waters impaired by "pollution"; Part 3 includes waters with approved TMDLs in progress; and Part 4 shall include impaired waters expected to meet water quality standards by next listing as a result of TBEL or other enforceable actions.

Regarding the list, a schedule must insure that TMDLs are established as expeditiously as practical. The list must be prioritized. TMDLs must be established no later than 10 years after the water was listed. (Note: can ask EPA for a 5-year extension.) Must identify each specific TMDL and the 1-year period in which it will be established.

A TMDL is a written plan and analysis for attaining water quality standards in all seasons for a specific water body and pollutant. The plan must contain 11 elements and must also contain a quantitative expression of the pollutant load reduction. The plan must receive at least 30 days of public comment.

Minimum elements of a TMDL shall include: name and location; pollutant load required to meet water quality standards; pollutant load currently present; pollutant sources; waste load allocations for point sources; load allocations for nonpoint sources; margin of safety; consideration of seasonal variations, stream flow, etc.; allowance for increases in pollutant loading, and an implementation plan.

The Implementation Plan must be based on the goal of attainment of water quality standards within 10 years. EPA does not expect the IP to be a complicated, lengthy document. For point source impaired streams, the following must be included: identification of waste load allocations; point sources to be regulated by the WLA; existing or new permits to be issued; and the schedule for issuing, reissuing or revising the permit. Also for point source impaired streams, the following must be provided: date

WQS will be attained; monitoring/modeling plan to measure progress; criteria to determine progress; and TMDL revision procedures. For nonpoint source impaired streams, the IP shall include: identification of source categories; description of regulatory or voluntary actions to provide reasonable assurances; schedule for implementing BMPs, etc., to achieve load allocations in 5 years; interim measurable milestones; monitoring/modeling plan to measure progress; criteria to determine progress; and TMDL revision procedures. For point and nonpoint impaired streams, the IP must include: elements of each of the criteria for point and nonpoint impaired streams described above; and a description of the extent to which WLAs reflect achievement of LA requiring reductions.

EPA must approve the TMDL within 30 days of submittal. If no substantial progress is made, then EPA must do the TMDL.

Various attendees then made general comments. The most common comment was regarding the time for which TMDLs must be done. Ms. Wagner stated that we must abide by the time specified in the regulation.

Next, Ms. Wagner provided copies of examples of TMDLs prepared by and/or for other States. Approximately 30 States are under court orders to prepare TMDLs.

Break for lunch at 11:30, resume at 12:30.

**12:40 p.m. TMDL Program Overview – America’s Clean Water Foundation
Perspective: Presented by Dr. Walton C. Poole**

Ms. Gray introduced Dr. Walton C. Poole, TMDL Program Administrator, America’s Clean Water Foundation. Dr. Poole stated that we need to focus on the direction to take when developing TMDLs. For every water body we review, we need to agree on what we want accomplished. Public participation is key to this process, without it we will not be successful.

Idaho developed a list identifying 962 impaired waters. As an average, for every State, there are approximately 1.8 TMDLs per one impaired water body. There are approximately 40,000 TMDLs throughout the U.S. Twenty-five (25%) percent of waters in the U.S. have been evaluated/monitored, leaving 75 % that have not been examined. We will have to modify the way we use our resources, or “how we do business.”

Dr. Poole advised the group to allow for increased waste load allocations when developing TMDLs. An example was provided where a planning group did not account for nonpoint sources when developing a TMDL. As a result, the TMDL was not effective. We need to be forthright about approach to TMDLs, if not, then we will have problems.

If TMDLs were implemented today, it could take between 15 – 25 years to see improvement of the impaired water(s). Approximately 1/6 of the population in the U.S.

moves every year. Thus, this affects the activity within watersheds. We need a “place-based solution,” where the population is energized (long-term commitment).

The cost of doing a TMDL was then briefly discussed. Dr. Poole stated that a single source TMDL could cost \$48,000 to develop (based on figure from 1996). Costs will vary, but with increased size of watershed, the greater the costs. Other factors can also impact the costs, such as the complexity of the water impairment. There is a large administrative burden/cost associated with preparing TMDLs, while funds are limited. However, there is a “cost” for not doing TMDLs, which would essentially limit the use of water bodies.

Dr. Poole stated that nonpoint sources are the most prevalent contributors to impairment of waters.

Recommendations for TMDL development:

- Partnering with other groups/agencies to undertake TMDLs (e.g., volunteer monitoring groups)
- Consider allowing a “third party” to do a TMDL (i.e., business/industry)
- Recognize portion of public with concern and/or opposition to proposed TMDLs. Need to focus extra on those groups.
- Need to exhibit trust within planning groups and with public.

1:42 p.m. Participant/Public Comment

Several advisory group attendees agreed with the concept of using “third parties” to assist with developing the TMDLs. Examples include universities, municipalities, health departments, contractors, etc.

One attendee asked Dr. Poole how to get this group focused on the direction to take. Dr. Poole responded that we need to look at the priority list, look at resources available and use a facilitator to focus the group. Another advisory group member asked how hard or long do you work to gain the support of a group of public who are in opposition to the proposal. Dr. Poole stated that you need to work hard at it, but you may not get them to disengage. However, you may be able to neutralize them. They need to gain your trust and feel that you have been fair and have listened to them.

A question was presented regarding further clarification of what a volunteer monitoring group is. This is a group, or groups, of volunteers who conduct actual monitoring/sampling of water. The level of the technicality of the sampling will affect the availability of volunteers.

Dr. Poole commented that there are three classes of TMDLs: 1) simple, 2) moderate, and 3) large/complex. He said that we should determine, as a group, what level of TMDL we are going to do. He does not think that anyone can develop a “perfect” TMDL, it would

be a rare occasion. We will never have enough information to do one perfectly. May never be able to reach a 95% confidence level for data.

Break at 2:35 p.m.

Resumed at 2:45 p.m. – Public Comment (continued)

Questions were once again asked, “Where do we want to go?” Dr. Poole responded that we need to go back to the priority list. Determine what needs to be on the list. Whatever happens on land affects the water and what affects the water affects land use.

One attendee expanded upon the volunteer monitoring program. It was stated that Indiana already has such a program, called the Hoosier River Watch, which is in coordination with Purdue Extension Service. The program is continually undergoing improvement and has a database on the Web. They train individuals who want to do monitoring for certain portions of streams. IDEM also has a lake quality monitoring program.

Questions were asked about current data/information availability for water bodies in Indiana. How is the listing done? What data do we have? IDEM attendees stated that the group first needs to learn what IDEM already has and uses for its listing. Cindy Wagner added that the 303(d) List is available on IDEM’s web site. In addition, this includes the sources of data used for the listing.

More discussion continued regarding data availability and accuracy and how to proceed with such information. Several persons expressed concern about “the charge” of the advisory group, i.e. “are we revising data or are we developing policy?”

Ms. Gray asked if we should use the next advisory group meeting to follow-up on main issues from this meeting. The consensus was that we should do so. Ms. Gray will develop a list of the main issues/concerns from this meeting and will forward to the attendees prior to the next meeting.

NEXT ADVISORY GROUP MEETING: January 4, 2001, from 10:00 a.m. – 3:30 p.m.

Meeting adjourned.